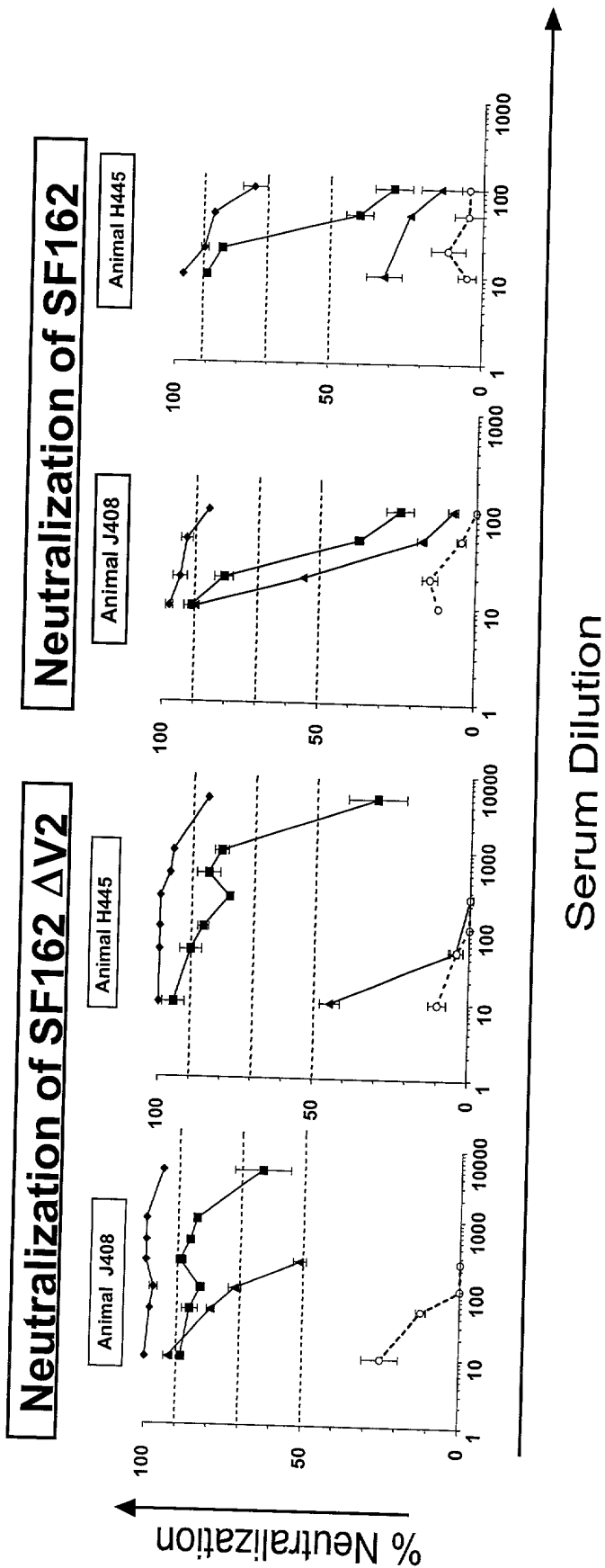
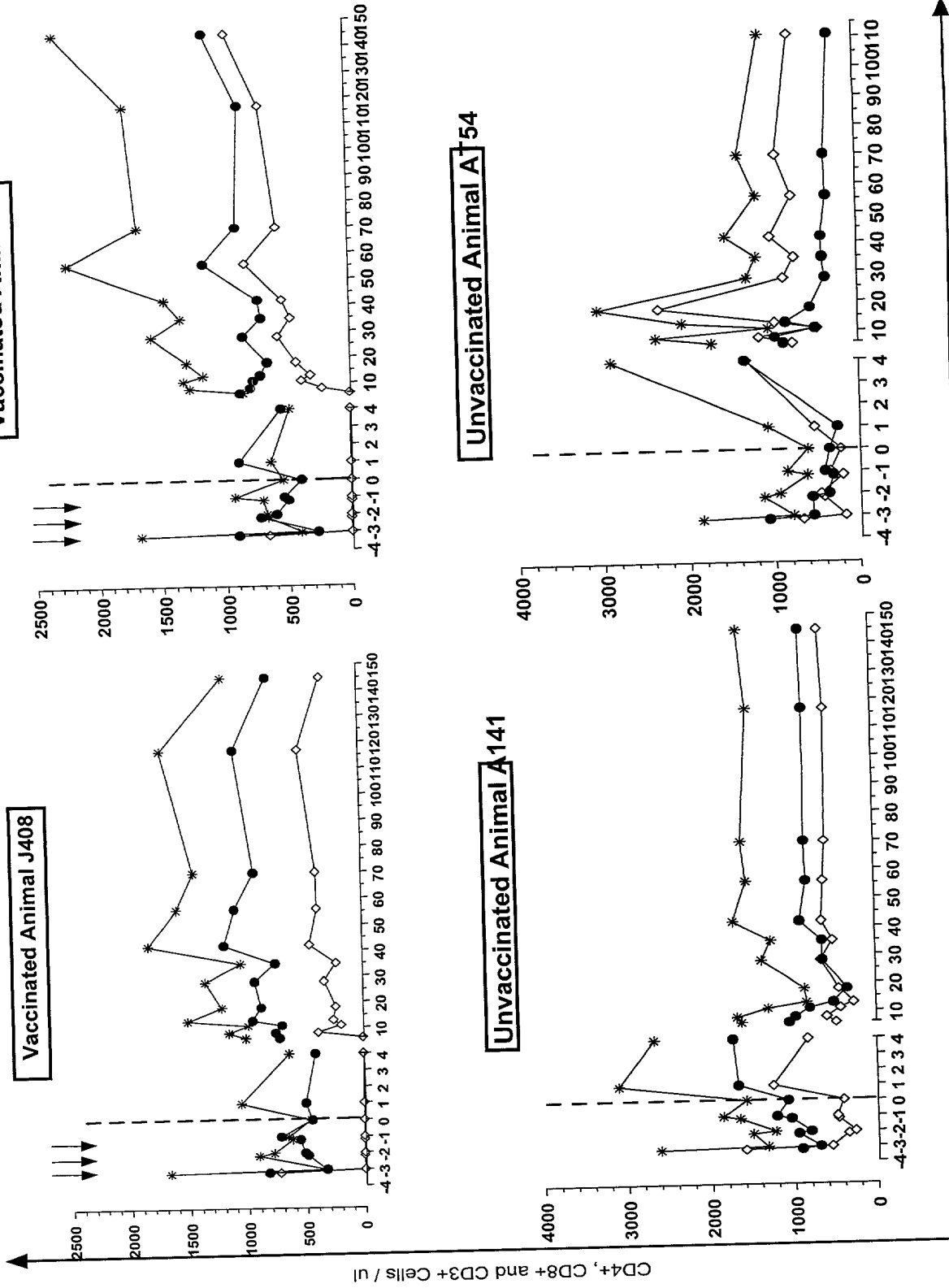


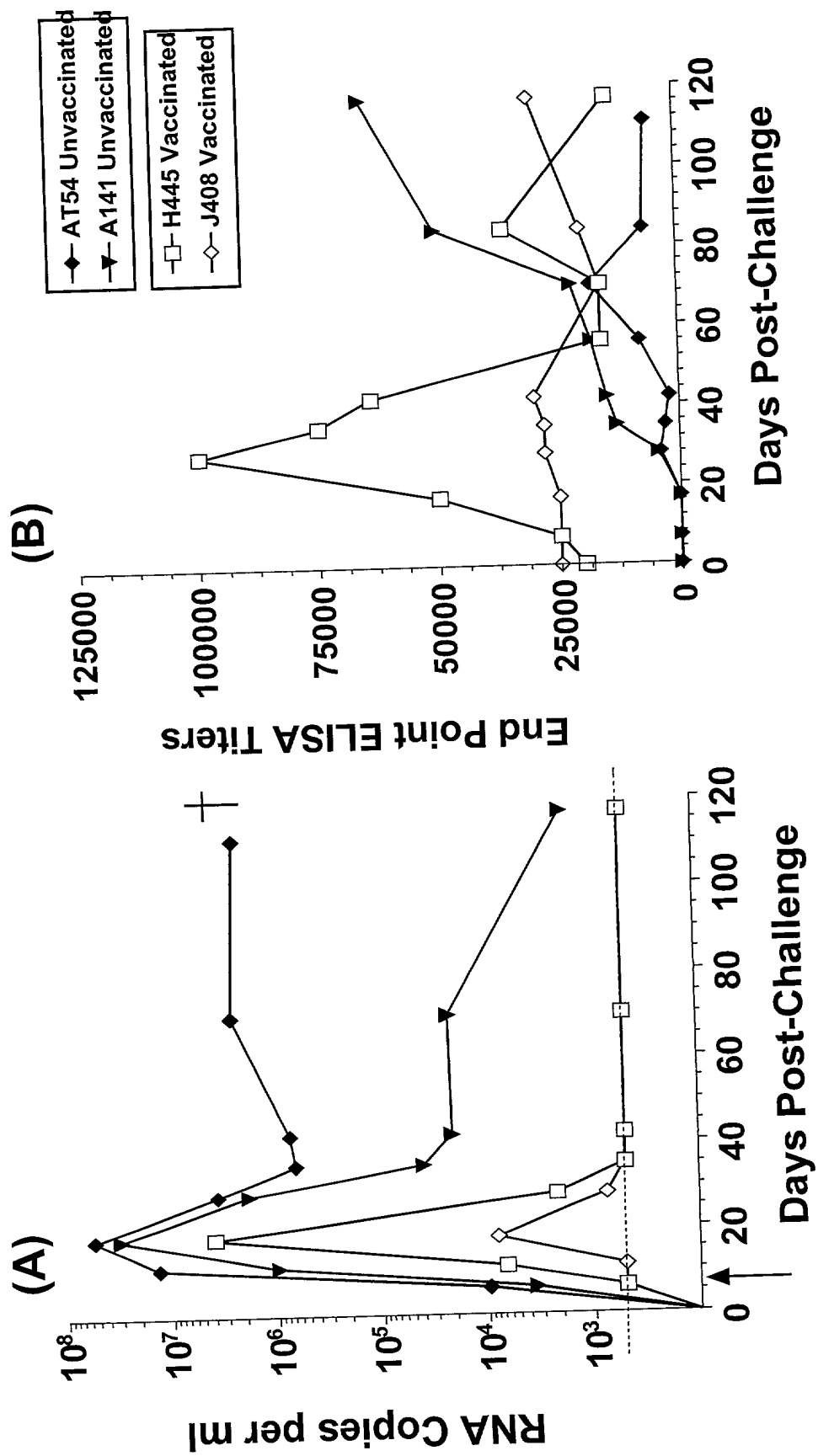
2570-1-001N FIGURE 1



2570-1-001N FIGURE 2

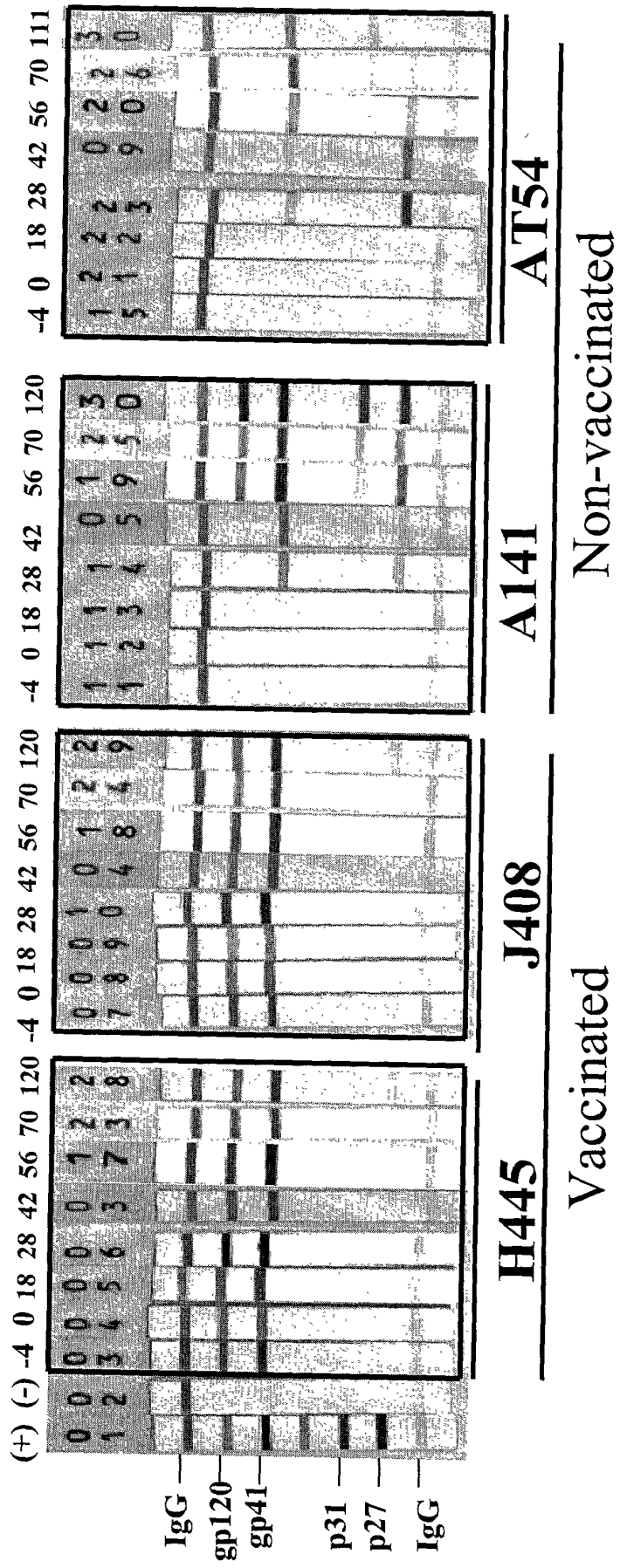
# 2570-1-001N FIGURE 3



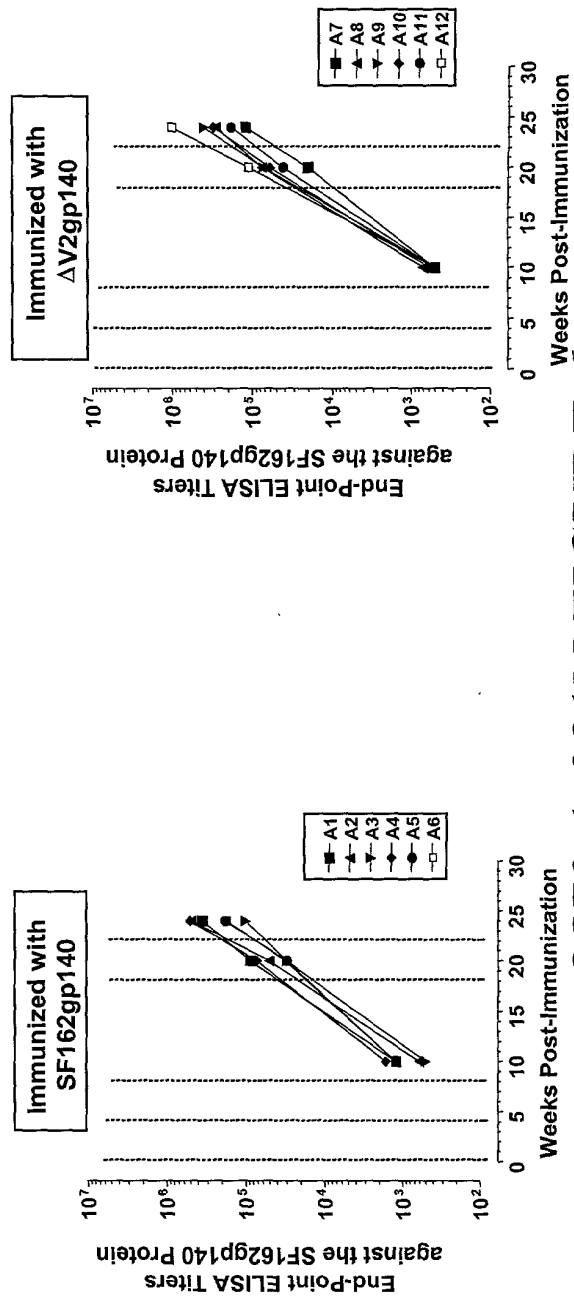
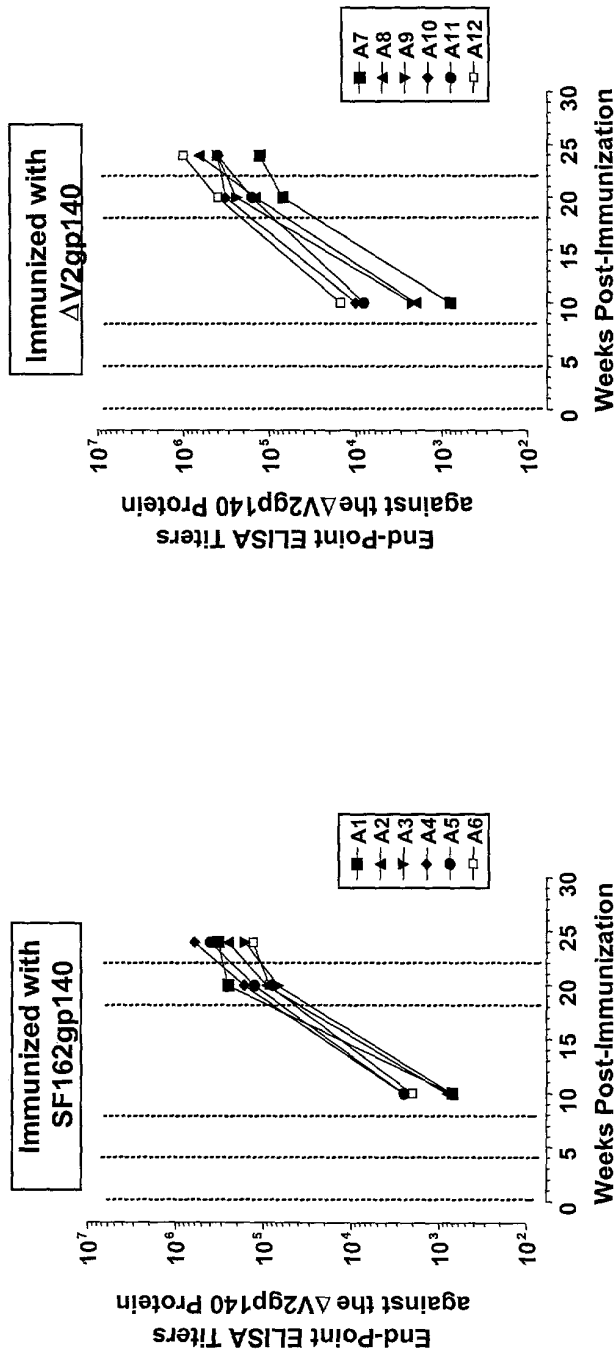


2570-1-001N

Seroconversion to SIV-gag/pol and HIV env Antigens

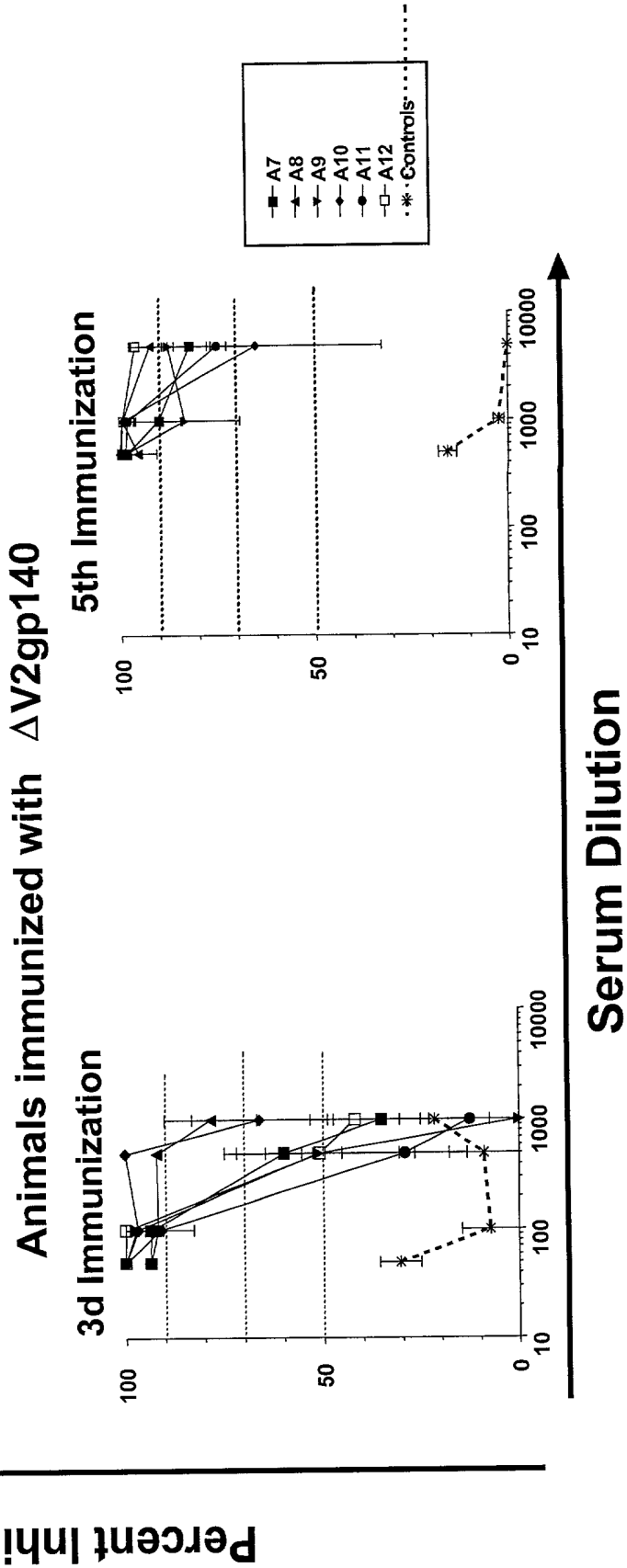
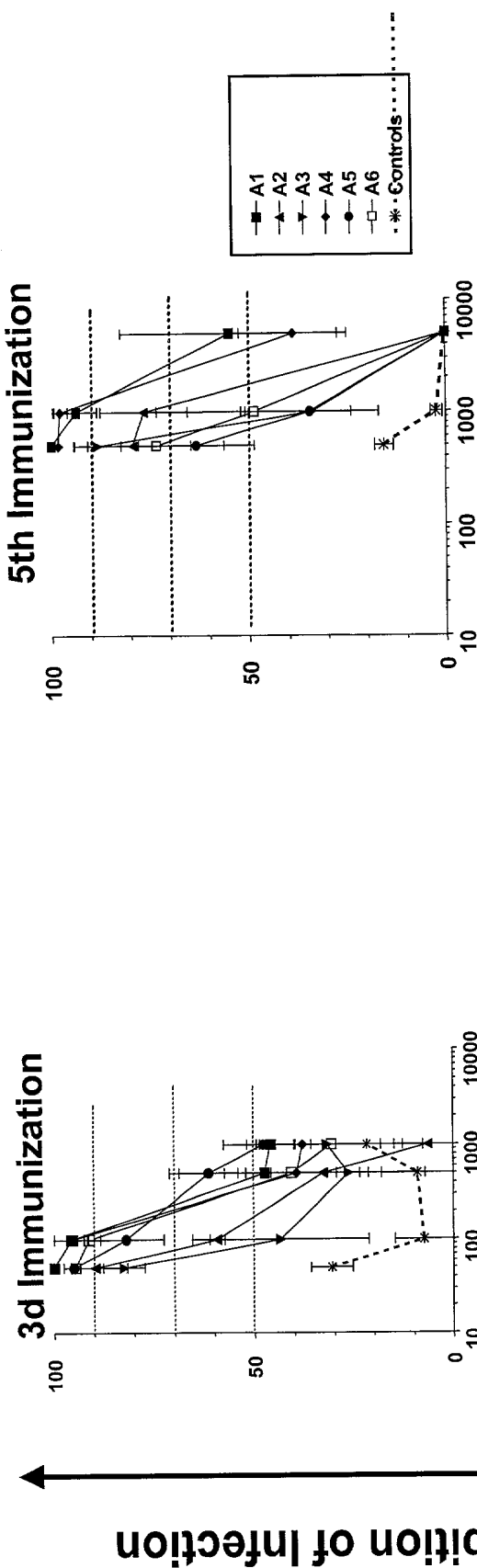


2570-1-001N FIGURE 5

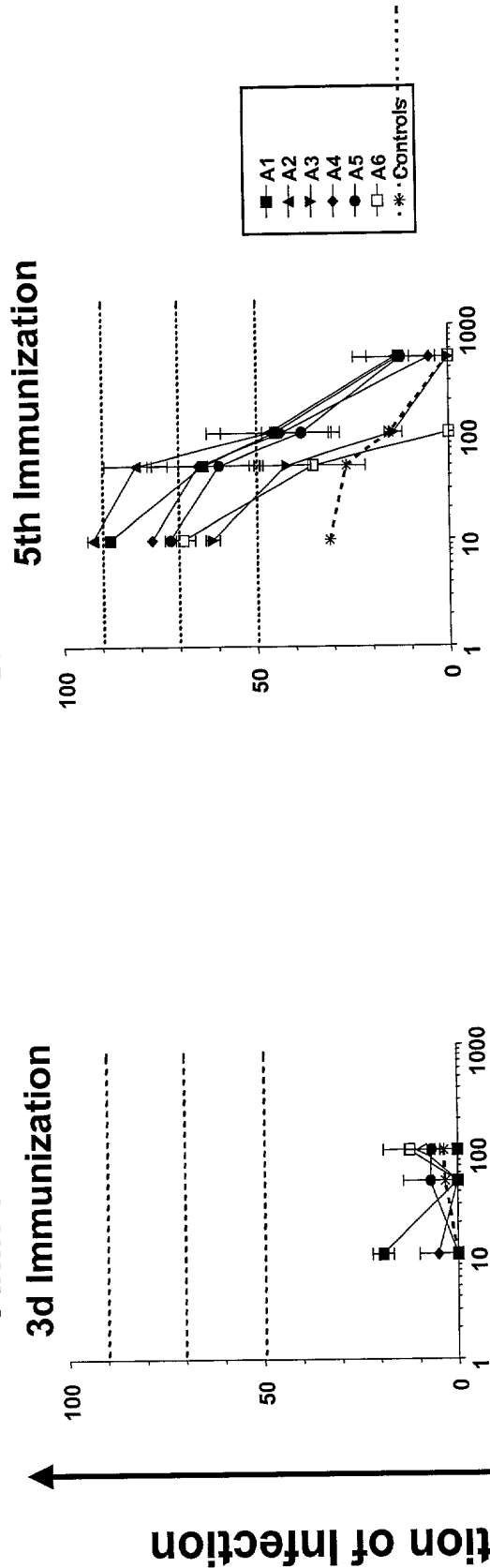


2570-1-001N FIGURE 6

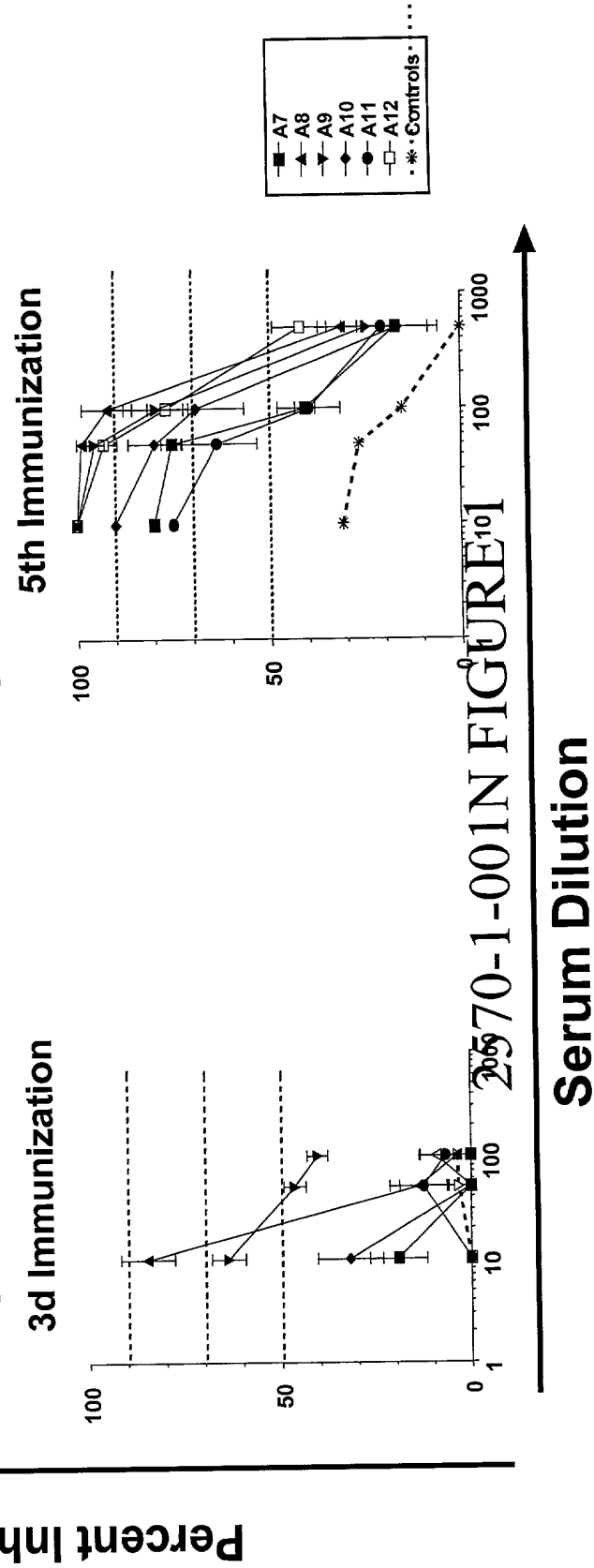
# Animals immunized with SF162gp140



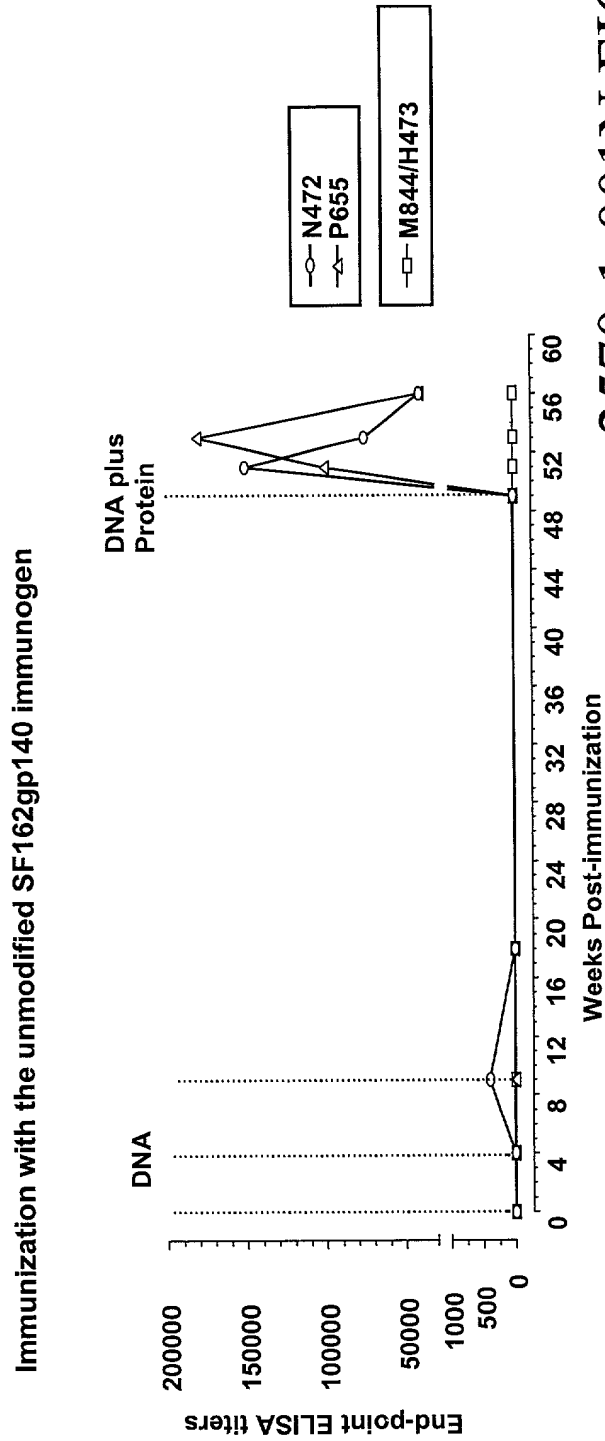
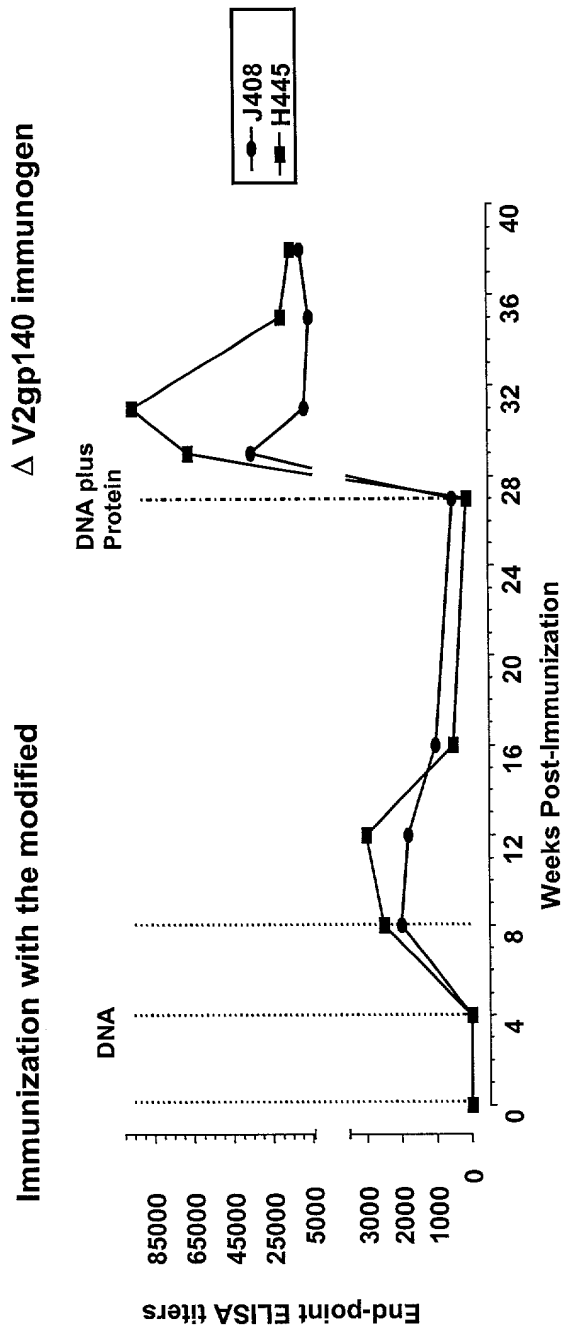
Animals Immunized with SF162gp140



Animals immunized with  $\Delta V2gp140$

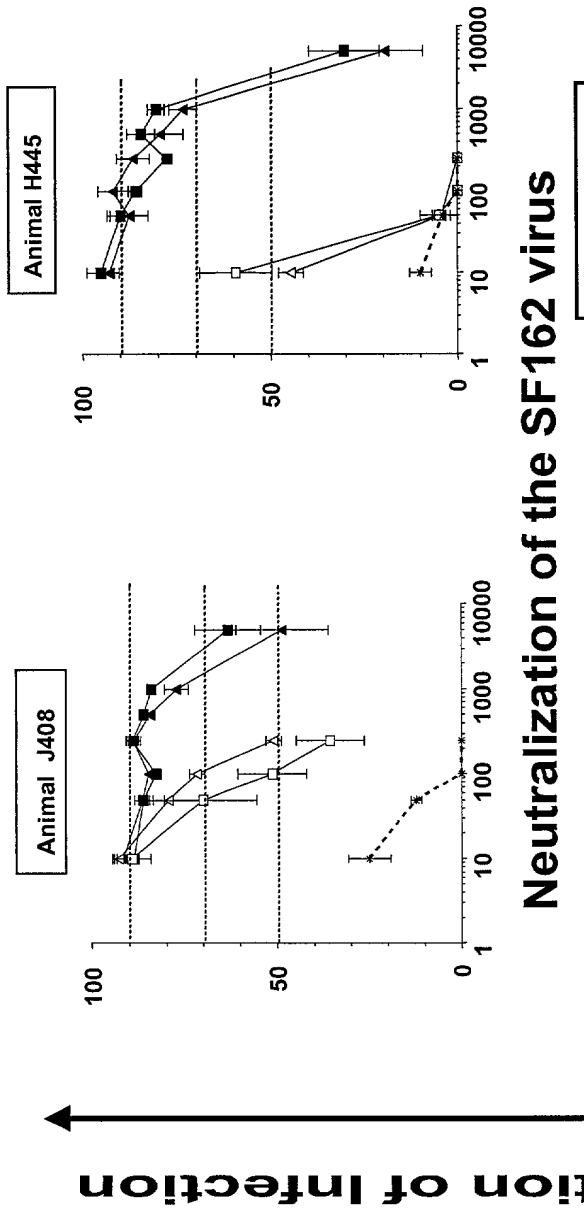




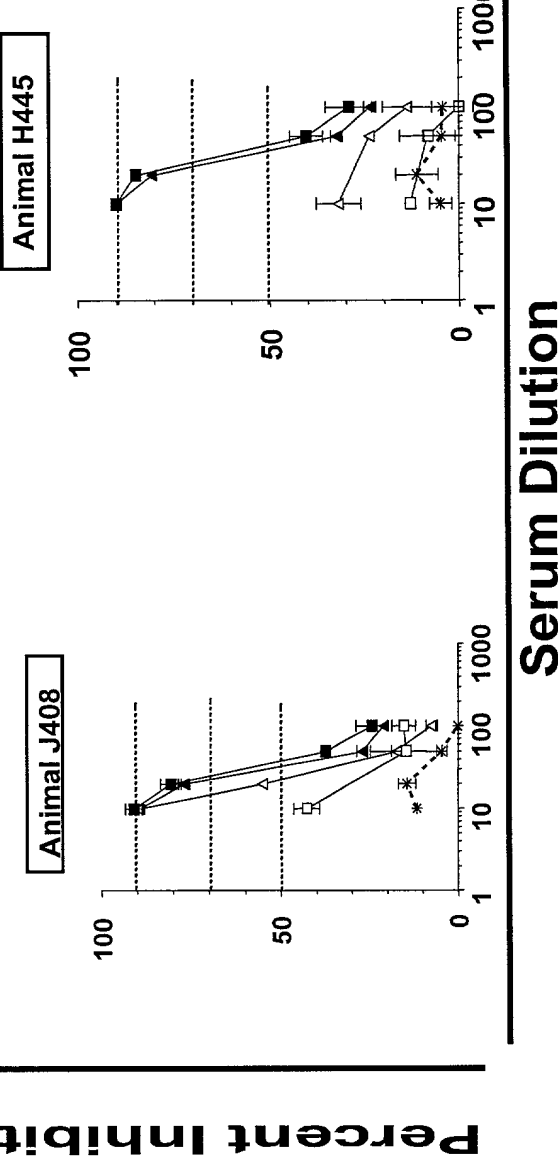


# 2570-1-001N FIGURE 9A

## Neutralization of the SF162 $\Delta$ V2 virus



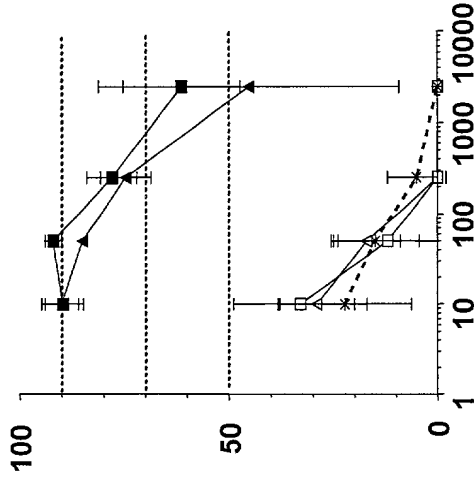
## Neutralization of the SF162 virus



Serum Dilution

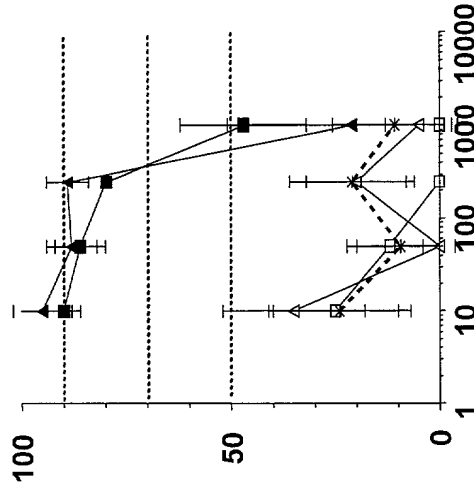
Neutralization of the SF162

Animal N472



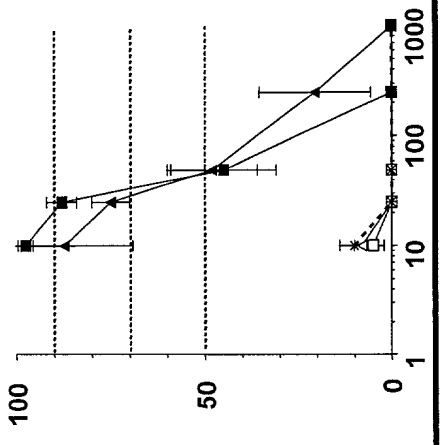
ΔV2 virus

Animal P655

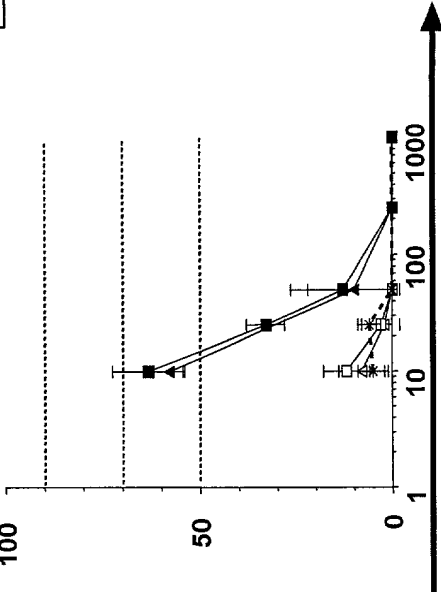


Neutralization of the SF162 virus

Animal N472



Animal P655

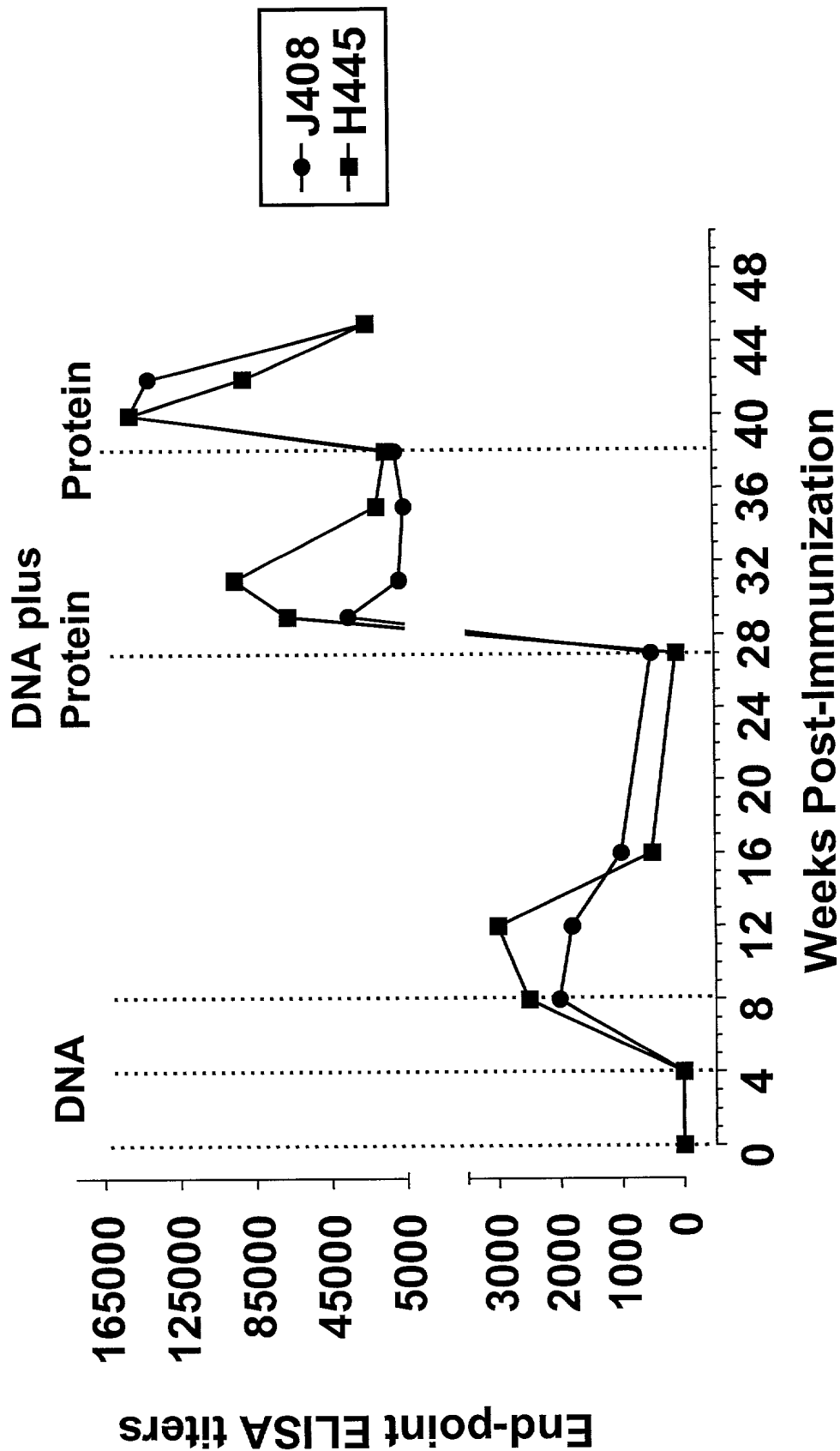


Serum Dilution

.\* Pre-bleeds ----  
□ 2nd DNA  
△ 3d DNA  
■ 2 weeks post boost  
▲ 4 weeks post boost

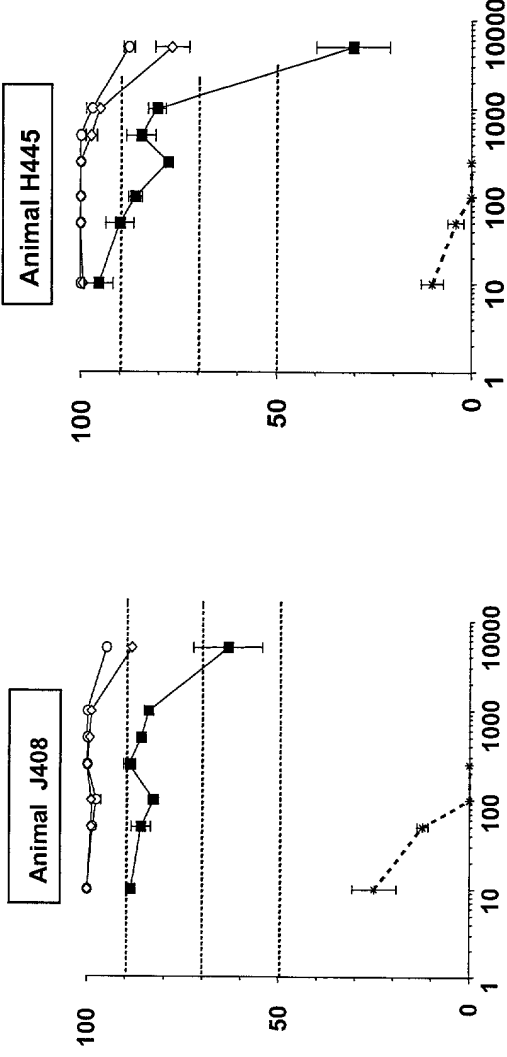


2570-1-001N FIGURE 11A

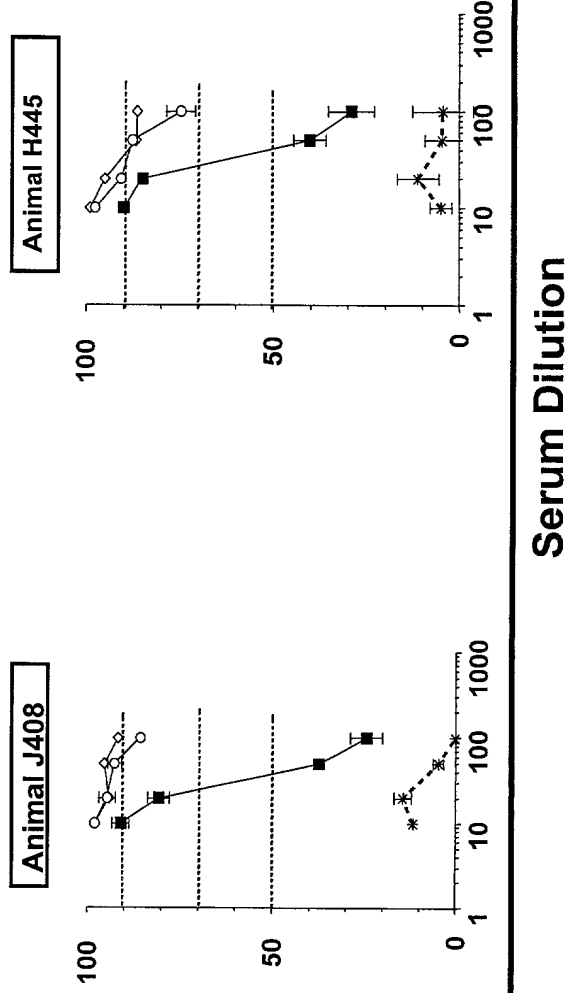


# Neutralization of the SF162

## $\Delta$ V2 isolate



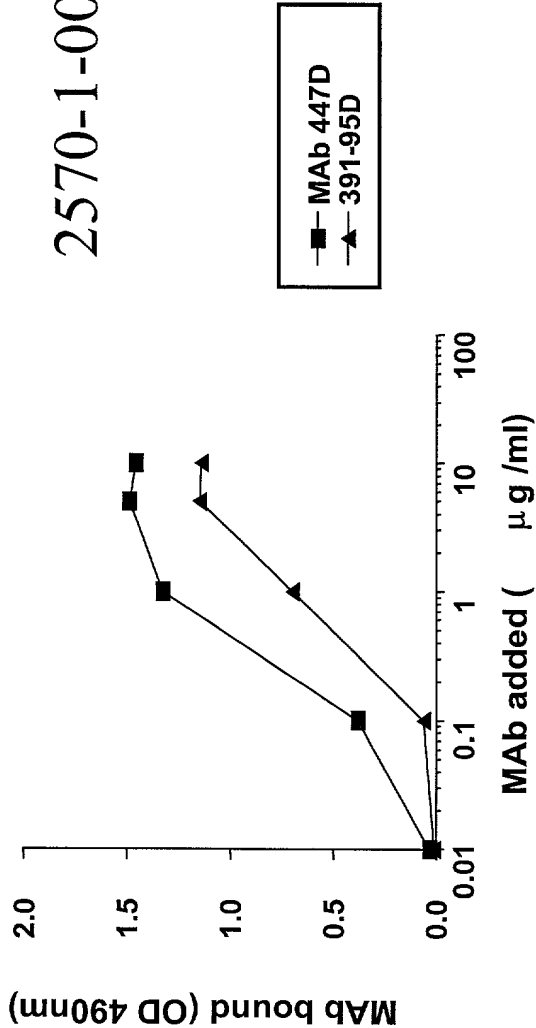
# Neutralization of the SF162 isolate



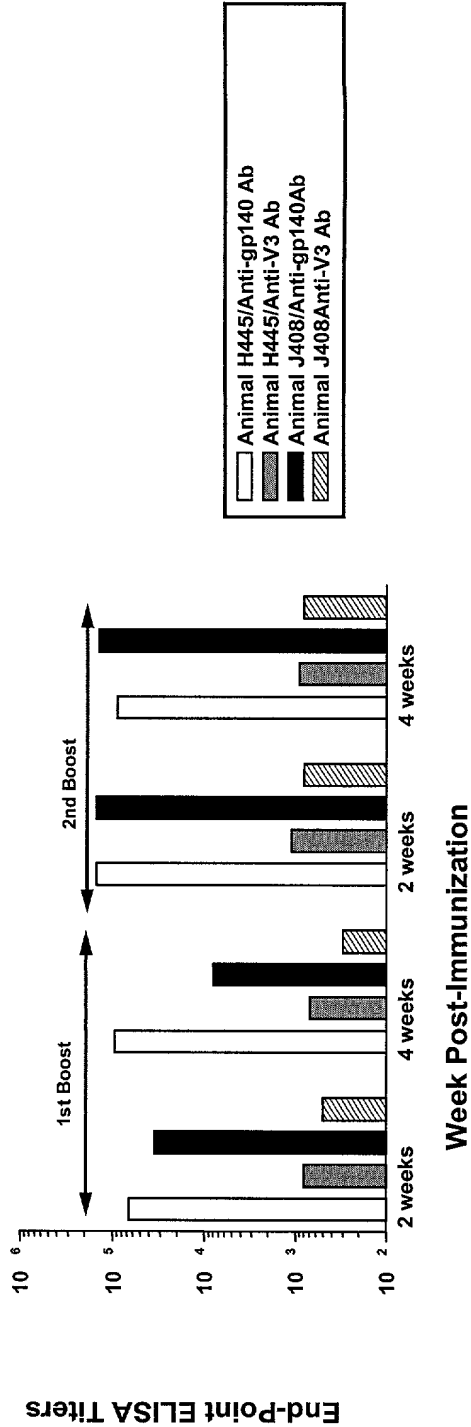
Percent Inhibition of Infection

Serum Dilution

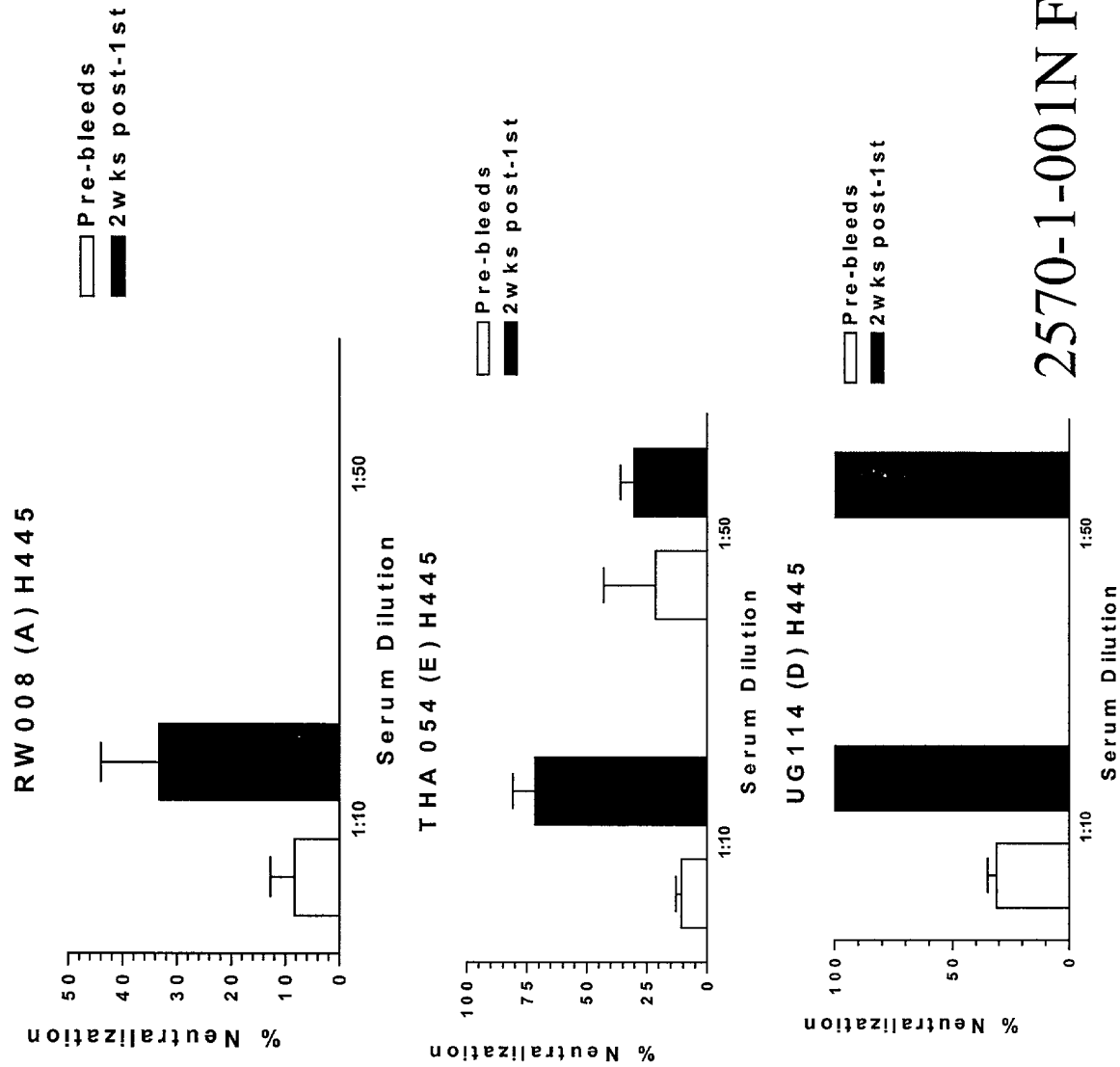
(A) Binding of Anti-V3 loop MAbs to the SF162  $\Delta$  V2-derived V3 loop peptide



(B) Binding of macaque serum antibodies to the  $\Delta$  V2gp140 protein and the corresponding V3 loop peptide

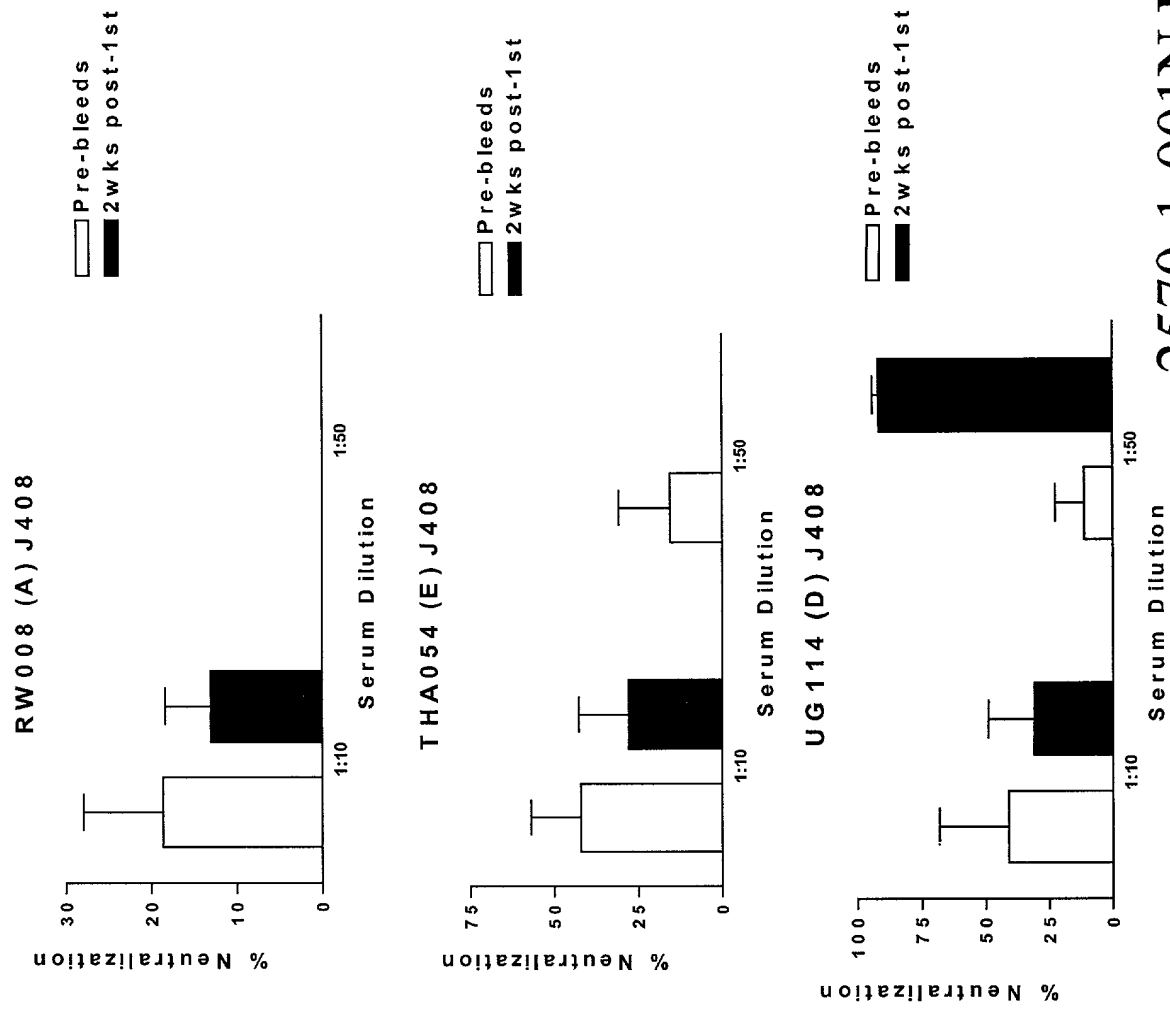


Neutralization of clade A, E and D HIV-1 viruses from sera collected from animal H445





Neutralization of **clade A, E and D** HIV-1 isolates  
from sera collected from animal J408



atgagagtg aaggggatca ggaagaatta tcagcacttg tggagagggg gcaccttgct  
 ccttgggatg ttgatgatct gtagtgctgt agaaaaattg tgggtcacag tctattatgg  
 ggtacctgtg tggaaagaag caaccaccac tctattttgt gcatcagatg ctaaagccta  
 tgacacagag gtacataatg tctggggcac acatgcctgt gtaccacag accctaacc  
 acaagaaata gtattggaaa atgtgacaga aaattttaac atgtggaaaa ataacatggg  
 agaacagatg catgaggata taatcagttt atgggatcaa agtctaaagc catgtgtaaa  
 gttaacccca ctctgtgtta ctctacattg cactaatttg aagaatgcta ctaataccaa  
 gagttagtaat tggaaagaga tggacagagg agaaataaaa aattgctctt tcaaggtc

-GGA-GCT-GGA-

aa attgataaat tgtaacacct cagtcattac  
 acaggcctgt ccaaaggat ctttgaacc aattcccata cattatttg ccccgctggg  
 ttttgcgatt ctaaagtgt atgataagaa gttcaatgga tcaggaccat gtacaaatgt  
 cagcacagta caatgtacac atggaattag gccagtagtg tcaactcaat tgctgttaaa  
 tggcagtcta gcagaagaag gggtagtaat tagatctgaa aatttcacag acaatgctaa  
 aactataata gtacagctga aggaatctgt agaaattaat tgtacaagac ctaacaataa  
 tacaagaaaa agtataacta taggaccggg gagagcattt tatgcaacag gagacataat  
 aggagatata agacaagcac attgtaacat tagtggagaa aaatggaata acactttaaa  
 acagatagtt acaaaattac aagcacaaat tgggaataaa acaatagtct ttaagcaatc  
 ctccaggagg gaccagaaa ttgtaatgca cagttttaat tgtggagggg aatttttcta  
 ctgtaattca acacagcttt ttaatagtac ttggaataat actatagggc caaataaacac  
 taatggaact atcacactcc catgcagaat aaacaaaatt ataaacaggt ggcagggaagt  
 aggaaaagca atgtatgcc ctccatcag aggacaaatt agatgctcat caaatattac  
 aggactgcta ttaacaagag atggtggtaa agagatcagt aacaccaccg agatcttcag  
 acctggaggt ggagatatga gggacaattg gagaagtga tatataaat ataaagtagt  
 aaaaattgag ccattaggag tagcaccac caaggcaaa agaaagagtgg tgcagagaga  
 aaaaagagca gtgacgctag gagctatgtt ccttgggttc ttgggagcag caggaaagcac  
 tatgggcgca cggtcactga cgctgacggt acaggccaga caattattgt ctggtatagt  
 gcaacagcag aacaatttgc tgagagctat tgaggcgcaa cagcatctgt tgcaactcac  
 agtctggggc atcaagcagc tccaggcaag agtcctggct gtggaagat acctaaagga  
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 ttggaatgct agttggagta ataaatctct ggatcagatt tggataaaca tgacctggat  
 ggagtgggag agagaaattg acaattacac aaacttaata tacaccttaa ttgaagaatc  
 gcagaaccaa caagaaaaga atgaacaaga attattagaa ttggataagt gggcaagttt  
 gtggaattgg ttgacatat caaaatggct gtggtatata aaa

agtgctgt agaaaaattg tgggtcacag tctattatgg  
 ggtacctgtg tggaaagaag caaccaccac tctattttgt gcatcagatg ctaaagccta  
 tgacacagag gtacataatg tctgggccac acatgcctgt gtaccacag accctaacc  
 acaagaaata gtattggaaa atgtgacaga aaattttaac atgtgaaaaa ataacatggt  
 agaacagatg catgaggata taatcagttt atgggatcaa agtctaaagc catgtgtaaa  
 gttaacccca ctctgtgtta ctctacattg cactaatgtg aagaatgtgta ctaataccaa  
 gagtagnaat tggaaagaga tggacagagg agaaataaaa aattgctctt tcaaggtc

**-GGA -GCT -GGA -**

aa attgataaat tgtaacacct cagtcattac  
 acaggcctgt ccaaagggtat ctttgaacc aattcccata cattattgtg cccggctgg  
 ttttgcgatt ctaaagtgtg atgataagaa gttcaatgga tcaggaccat gtacaaatgt  
 cagcacagta caatgtacac atggaattag gccagtagtg tcaactcaat tgctgttaaa  
 tggcagtcta gcagaagaag ggtagtaaat tagatctgaa aatttcacag acaatgctaa  
 aactataata gtacagctga aggaatctgt agaaattaat tgtacaagac ctaacaataa  
 tacaagaaaa agtataacta taggaccggg gagagcattt tatgcaacag gagacataat  
 aggagatata agacaagcac attgtaacat tagtggagaa aaatggaata acactttaaa  
 acagatagtt acaaaattac aagcacaaat tgggaataaa acaatagttt ttaagcaatc  
 ctgaggagg gaccagaaa ttgtaatgca cagttttaat tgtggagggg aatttttcta  
 ctgtaattca acacagcttt ttaatagtac ttggaataat actatagggc caataaacac  
 taatggaaact atcacactcc catgcagaat aaaacaaatt ataaacaggt ggcaggaaat  
 aggaaaagca atgtatgcc ctccatcag aggcacaaat agatgctcat caaatattac  
 aggactgcta ttaacaagag atggtgtgtaa agagatcagt aacaccaccc agatcttcag  
 acctggagggt ggagatatga gggacaattg gagaagtga ttatataat ataaagtagt  
 aaaaattgag ccattaggag tagcaccac caaggcaaa agaaagagtgg tgcagagaga  
 aaaaagagca gtgacgctag gagctatgtt ccttgggttc ttgggagcag caggaaagcac  
 tatgggcgca cggtcactga cgctgacggt acaggccaga caattattgt ctggtatagt  
 gcaacagcag aacaatttgc tgagagctat tgaggcgcaa cagcatctgt tgcaactcac  
 agtctggggc atcaagcagc tccaggcaag agtcctgggt gtggaagat acctaaagga  
 tcaacagctc ctagggatgtt ggggtgtgtc tggaaaactc atttgacca ctgctgtgct  
 ttggaatgct agttggagta ataatctctt ggatcagatt tgggaataaca tgacctggat  
 ggagtgggag agagaaattg acaattacac aaacttaata tacaccttaa ttgaagaatc  
 gcagaaccaa caagaaaaa atgaacaaga attattagaa ttggataagt gggcaagttt  
 gtggaattgg ttgacatat caaaatggct gtggtatata aaa

2570-1-001N FIGURE 15

Amino acid sequence of SF162DV2 gp140

MRVKGIRKNYQH<sup>1</sup>LRGGTLLGLMICS<sup>2</sup>AVEKLWVTVYYG  
 VPVWKEAT<sup>3</sup>TLFCASDAKAYDTEVHN<sup>4</sup>VWATHACVPTDPNPQ  
 EIVLENVTENFNMWKN<sup>5</sup>NMVEQM<sup>6</sup>HEDIISLWDQSLKPCVKLT  
 PLCVTLHCTNLK<sup>7</sup>NA<sup>8</sup>TNTKSSNW<sup>9</sup>KEMDRGEIKNC<sup>10</sup>SFKV-GAG-  
 KLINCNTSVITQACPK<sup>11</sup>VSFEP<sup>12</sup>PIHYCAPAGFAILKCNDKKFN  
 GSGPCTNVSTVQCTHGIRPV<sup>13</sup>VSTQLLLNGSLAEEGVVIRSENF  
 TDNAKTIIVQLKESVEIN<sup>14</sup>CTRPNN<sup>15</sup>TRKSITIGPGRAFYATGDI  
 IGD<sup>16</sup>IRQAH<sup>17</sup>CNISGEKWN<sup>18</sup>NTLKQIVTKLQAQFGN<sup>19</sup>KTIVFKQSS  
 GGDPEIVMHSFNCGGEFFYC<sup>20</sup>NSTQLFNSTWN<sup>21</sup>NTIGP<sup>22</sup>NTNG  
 TITLPCRIKQIINRWQEVGKAMYAPP<sup>23</sup>IRGQIRC<sup>24</sup>SSNITGLLLTR  
 DGGKEISNTTEIFRPGGDMRD<sup>25</sup>NWRSEL<sup>26</sup>YKYK<sup>27</sup>VVKIEPLGV  
 APTKAKRRV<sup>28</sup>VQREKRAVTLGAMFLGFLGAAGSTMGARSL  
 TLT<sup>29</sup>VQARQLSGIVQQQNNLLRAIEAQ<sup>30</sup>QHLLQLTVWG<sup>31</sup>IKLQ  
 ARVLAVERYLK<sup>32</sup>DQQLGIWGC<sup>33</sup>SGK<sup>34</sup>LICTTAVPW<sup>35</sup>NASWS<sup>36</sup>NK  
 SLDQIWN<sup>37</sup>NTWMEWE<sup>38</sup>REID<sup>39</sup>NYTNLIYTLIE<sup>40</sup>SQN<sup>41</sup>Q<sup>42</sup>Q<sup>43</sup>EKNE  
 QELLELDKWASLWNWFDISKWLWYIK

2570-1-001N FIGURE 16

Amino acid sequence of SF162DV2 gp140 less 27 amino acid N-terminal

SAVEKLWVTVYYG  
 VPVWKEATTLFCASDAKAYDTEVHNVWATHACVPTDPNPQ  
 EIVLENVTENFNMWKNMVEQMHEHDIISLWDQSLKPCVKLT  
 PLCVTLHCTNLKNAATNTKSSNWKEMDRGEIKNCSEFKV-GAG-  
 KLINCNTSVITQACPKVSFEPPIHYCAPAGFAILKCNDKKN  
 GSGPCTNVSTVQCCTHGIRPVVSTQLLLNGSLAEEGVVIRSENF  
 TDNAKTIIVQLKESVEINCTRPNNNTRKSITIGPGRIFYATGDI  
 IGDIRQAHCNISGEKWNNTLKQIVTKLQAQFGNKTIVFKQSS  
 GGDPEIVMHSFNCGGEFFYCNSTQLFNSTWNTIGPNNNTNG  
 TTTLPCRIQIINRWQEVGKAMYAPPIRGQIRCSSNITGLLLTR  
 DGGKEISNTTEIFRPGGDMRDNWRSELKYKVVVIEPLGV  
 APTKAKRRVVQREKRAVTLGAMFLGFLGAAGSTMGARSL  
 TLTVQARQLLSGIVQQQNNLLRAIEAQQHLLQLTVWGIKLQ  
 ARVLAVERYLKDQQLLGWGCSGKLICTTAVPWNASWSNK  
 SLDDQIWNNTWMEWEREIDNYTNLIYTLIEESQNQQEKN  
 QELLELDKWASLWNWFDISKWLWYIK

2570-1-001N FIGURE 17